

CLIMATE CHANGE ADVISORY COMMITTEE REGULAR MEETING WEDNESDAY, MARCH 16, 2022 5:30 – 7:30 PM ZOOM MEETING

THE CLIMATE CHANGE ADVISORY COMMITTEE WILL HOLD THIS MEETING USING A VIRTUAL, ZOOM WEBINAR, PER GOVERNOR INSLEE'S "STAY HOME, STAY HEALTHY" ORDERS

MEMBERS OF THE PUBLIC WILL BE ABLE TO CALL IN TO THE ZOOM MEETING

PLEASE CLICK THE LINK BELOW TO JOIN THE WEBINAR: <u>HTTPS://BAINBRIDGEWA.ZOOM.US/J/91390380790</u> OR TELEPHONE: 1 253 215 8782

WEBINAR ID: 913 9038 0790

AGENDA

5:30 Call meeting to Order/Roll Call/Accept of Modify Agenda/Conflict of Interest Disclosure

5:35 Approve February 16th minutes

5:40 Public Comment

- 5:45 Requests/Information/Updates from COBI Climate Mitigation/Adaptation Officer (Autumn Salamack)
 - 1. Request: COBI application for renewable energy technical assistance program (Sean Easterly from NREL will be available for questions) Link to program:

https://www.nrel.gov/state-local-tribal/etipp-technical-assistance.html (application attached)

- CCAC endorsement for application (draft letter attached)
- CCAC sub-group to help review application
- 2. Request: Climate Smart Bainbridge: Branding and Challenge Update
 - Climate Smart Challenge and term limited position to help with community engagement
 - New logo for Climate Smart Bainbridge branding for climate action programs (see attached logo)
 - CCAC endorsement for the "Why Join" letter for the climate challenge website (see attached "Why Join...")
- 3. Request: Potential for CCAC education and outreach sub-committee to assist with workshops, climate challenge, Earth Month table, etc.
- 4. Info: General updates
 - RFQ for "Measuring GHG emissions reductions associated with sustainable transportation options" (final draft RFQ attached)
 - Solar/battery energy storage at community disaster hubs
 - New website resources:
 - o Replace your wood stove page: https://www.bainbridgewa.gov/1355/Replace-your-wood-stove
 - Climate Smart video tips for reducing emissions with wood smoke (view at the ~3:08 mark): https://www.youtube.com/watch?v=yjXWQO8dd5w.
 - o Reduce junk mail page: https://www.bainbridgewa.gov/1337/Reduce-waste
 - IPCC Sixth Assessment Report (February 28th)
 - o Link to summary report for policymakers: https://www.ipcc.ch/report/ar6/wg1/
 - o Summary of key takeaways from the latest IPCC report (see attached from King County staff)

6:45 Discussion and approval of CCAC recommendations on Sustainable Transportation Plan (Steve Richards – see attached)

7:00 Discussion and approval of Sustainable Transportation Metrics and Sustainable Construction Tools (Mike Cox – see links)

https://docs.google.com/document/d/1RtD-RJsQD842ugKnrQdQg9eHqLpCiRv2nsKmdvb2W8c/edit?usp=sharing

https://docs.google.com/spreadsheets/d/14CJZosPhg3uBXerTg7c6kKG9AM_VDawNh9mSg0GvYfc/edit?usp=sharing

7:10 PSE – Questions from CCAC on CEIP (David McCaughey – see attached)

7:20 Climate Action Plan Updates

- Waste Management and Biodigester (Autumn/Subgroup)
- UW intern (Autumn)
- Groundwater Management Plan (Deb)
- Other

7:30 Adjourn

Materials

- 1. February minutes
- 2. Energy Transitions Initiative Partnership Project Community Technical Assistance
- 3. Draft CCAC endorsement letter for renewable energy technical assistance program
- 4. New logo for Climate Smart Bainbridge branding for climate action programs
- 5. Climate Smart Challenge "Why Join" endorsement letter
- 6. RFQ for "Measuring GHG emissions reductions associated with sustainable transportation options"
- 7. CCAC recommendations on Sustainable Transportation Planning
- 8. Summary of key takeaways from the latest IPCC report from King County staff
- 9. Links to Reports on Sustainable Transportation Metrics and Sustainable Construction Tools
- 10. PSE questions from CCAC on CEIP

Climate Change Advisory Committee Meeting Minutes Wednesday February 16, 2022

Present: Committee members Michael Cox, Steve Richard, Deborah Rudnick, David McCaughey, Derik Broekhoff, John Kydd, Jens Boemer

Council Liaison: Kirsten Hytopoulos, Leslie Schneider (for first hour)

City staff: Autumn Salamack

Attendees: Nick Shiach; Andy Swayne, Diann Strom and Brian Tyson and Kierra Phifer PSE; Marci Burkel

No conflict of interest stated.

Approval of January minutes: moved by Steve, seconded by John, all approve minutes

Public Comment: Jens works for a company that occasionally works for PSE, not involved with the plan being presented tonight.

Discussion:

PSE Clean Energy Implementation Plan:

Brian Tyson and Kierra Phifer, local government affairs for PSE, presented information about the CEIP. PPT presentation is included in the agenda packet.

- we are currently about 37% renewables/non-emitting sources according to Brian- plan to go to 63% by 2025.
- need to have measurements of benefits to vulnerable communities
- point made by Deb that indoor air quality is not listed as a component of measurements of public health- Brian noted it is an embedded component of "improved home comfort" and asked for any insights or measurements that could be added.
- John asked for more information about natural gas current consumption and forward predictions, and wants to know about the non-renewables still comprising the remaining 37% in 2025. Brian said they could provide this.
- Mike asked about BI community solar pilot- PSE is still in contracting process
- Derik asked about disposition of Coalstrip intend to be out of coalstrip by 2025 per CETA requirements.
- Asked about challenges of load growth with EV increase- perhaps need to follow up to get more information on this
- Resiliency/emergency preparedness: CEIP does touch on this, but yet to be integrated

- How are they including climate change? Looking forward PSE is trying to incorporate climate into their forecasting, leaning on partner models, but not a big part of this CEIP, updates to the CEIP climate forecasting impacts on energy can be included.
- Directions for public comment on the CEIP and links to programs for customers including community solar and green direct are provided in the PPT
- Deb wants to know more about their community solar plans- all three community projects on their website are full and waitlisted

2022 Climate Officer Update – Autumn

- Working on a request for proposal to analyze emergency hubs for solar and storage
- Proceeding with new court and police facility, Autumn shared with CM the 2020 info from CCAC on green building design regarding that facility
- Starting monthly climate action video feature- first one on wood smoke and on rebate and recycling wood stove through PSCAA
- Just closed Engage Bainbridge website looking for workshop feedback, got 92 responses, can share out responses. About 10 categories listed, and 5 got more than 20 votes each:
 - Low carbon transportation
 - o Lower energy bills
 - Water conservation
 - o Climate change impacts on island
 - o Opportunities for installing/purchasing renewable energy
- need staffing for waste reduction ordinances and community climate challenge, request for a term-limited position to provide education and outreach on these fronts
- Council did discuss sustainable transportation plan last night, Autumn suggests we may
 want to provide feedback on STTP- if we want to submit something on STTP or preferred
 scenarios, could discuss at next meeting
- First internal staff discussion on code-related issues in the CAP. Looking at underutilized codes and how we enforce or interpret to support CAP; looking at current code and how it can be updated to better support CAP; looking for code overlap.
- Reviewed whether we should be posting our memos and roadmaps- David moved that
 we take all previously approved communications to be posted, and those that have not
 will be reviewed. First by John, seconded by Steve, all approved. Mike will review what's
 already been approved and everyone who is the author will review and next committee
 meeting we can decide which of these should be posted.
- Community climate challenge: final language in negotiation with platform; contact designer on board; once contract signed about 3 weeks to customize platform, Autumn is pulling together local links and resources. Climate Smart Bainbridge is the approved name.

Sustainable Transportation Metrics and Construction Tools – Nick Shiach Nick has been working on and off as a research intern for Climate Action Bainbridge around sustainable transportation and other topics. This presentation was about methods for sustainable transportation decision-making. Federal way, Bellevue, PSRC, WSDOT, Olympia and others interviewed.

Vehicle Miles Traveled (VMT)- being adopted more widely, CA has replaced LOS with VMT. VMT is a better transportation metric as it encourages density and shorter commute times vs LOS focus on clearing congestion regardless of length of commute.

Identified 3 options for measuring sustainable transportation decision making:

- 1. Sketch models: tell us how much different actions can move us towards our goals. Bigger levers to decrease emissions are land use and running an analysis can help visualize this.
- 2. Cell phone data: StreetLight: google-maps based, crowdsourcing from apps used by individuals. 6K for the city to buy and use their data to understand traffic behavior
- 3. Qualitative data: things that are not GHGs or VMT but still should be considered. Things like network completion, meeting needs in denser areas, locations most and least walkable and bikeable.

Next steps include completing a report on possible performance metrics; hiring a consulting firm (underway now); focus on system-wide analysis and not on embedded emissions.

Derik mentioned whether we should be urging STTF to consider EV adoption. Other pieces to be considered in here, but this is really focused on emissions reductions. Autumn discussed that there is use in some of these tools, for sure, to evaluate the full suite of potential suite and to help us improve ongoing monitoring, and Autumn and Mark will be discussing.

CCAC Sustainable Transportation Project Measurement Recommendations:
-Subgroup including Mike, Derik, Deb, Steve and discussing with Autumn and Mark Epstein.
Memo is in packet, Mike reviewed with committee and looked for questions and approval.
Mike offered the suggestion and Steve moved, John seconded, that we approve the memo and that we send it to our liaisons at Council for sharing with the broader council.

CAP updates:

Biodigester: next week staff is going to discuss waste management with City Council next Tuesday. Subgroup has talked with Green Mountain Technologies (aerobic), and with Impact Bioenergy (anaerobic), and next week's

Groundwater Management Plan: Outline for plan has been sketched out, having conversations now around what data sets are extant and needed. Revisiting monitoring well history. GWMP information meeting March 2. https://www.bainbridgewa.gov/1320/Groundwater-Management-Plan

Capstone Student: Moving forward with senior center meeting next Tuesday.

Questions for PSE should go to David.

STTP- do we want to give input. Public comment period in March/April.

Group ideas to Steve for him to compile on sustainable transportation plan- all committee members who are interested should send their ideas to Steve for compilation for discussion at our next meeting.

Meeting adjourn moved by Derik, seconded by Jens. Adjourned 7:37 pm.

Chair	03/17/22

Energy Transitions Initiative Partnership Project Community Technical Assistance

The <u>Energy Transitions Initiative Partnership Project</u> (ETIPP) Community Technical Assistance program is a National Renewable Energy Lab (NREL) program to help remote, island, and islanded communities transform their energy systems and increase energy resilience. There's no funding or match requirements associated with this program – we would receive direct technical assistance from ETIPP experts in the form of strategic energy analysis and planning.

PSE staff shared this opportunity and have indicated they are willing to provide data and some staff time to help support this project. This project aligns with our Climate Action Plan goal for all of Bainbridge Island's sources of electricity to be carbon-free by 2040, and community interest in achieving that goal even sooner.

Proposed Project: Request technical assistance to identify what it would take (and cost) to achieve 100% renewable electricity on the island by 2030. This aligns with our Climate Action Plan and responds to community interest in accelerating the decarbonization of our electricity supply and increasing resilience to frequent power outages on the island. Questions to be addressed in the technical assistance project include the following:

- Can we get to 100% renewable electricity for the island by 2030, taking into consideration current and future energy needs with increased vehicle and ferry electrification?
- How does NREL recommend we accomplish this goal?
- What onsite and offsite infrastructure (or green power purchasing programs) would be needed to achieve that goal?
- What would it cost to achieve this goal?

Timeline:

- City Council agenda item April 12, 2022
- Application due April 15, 2022
- Project scoping: 1-2 months
- Technical assistance: 12-18 months

What's Required – Program Activities:

- <u>Phase 1</u>: Participate in up to six 1-hour calls with ETIPP staff in the spring and summer of 2022 to scope the work that will be undertaken during the 12- to 18-month technical assistance period.
 - o Core Participants: Autumn, Public Works staff member, CCAC members (likely a subgroup) and a PSE representative
- <u>Phase 2</u>: Participate in one to two 1-hour monthly calls (or at a frequency that the project requires) with ETIPP staff for the 12- to 18-month technical assistance period.
 - Participants: TBD, but likely the same group as identified for Phase 1
- Answer questions from ETIPP partners or requests for additional information in a timely manner (within two weeks of receiving the questions, or as advised by the ETIPP staff).
 - Autumn to coordinate requests/responses.
- After the project is complete:
 - o Respond to a follow-up questionnaire about the technical assistance after the project is complete.

- o Share experience and lessons learned via webcast or conference call with other communities identified by the ETIPP team.
- Work with an ETIPP regional partner to provide photos, diagrams, video footage, quotes, or interviews, as appropriate and relevant to the ETIPP project, for media inquiries and other requests.

Application Questions

Need (35%)

- 1. Provide a general overview of your community's energy system; its risks, challenges, and/or vulnerabilities that provide context for your resilience-related request for technical assistance; and the existing barriers that prevent your community from applying and maintaining energy solutions. (500 words maximum)
- 2. Provide information (e.g., geography, data/statistics or analysis, source citations, graphics, photos) that describes your community as a remote, island, or islanded community. (200 words maximum)
- 3. ETIPP tailors the technical assistance a community receives by understanding a community's energy resilience. If applicable, provide previous, ongoing, or planned projects, funding, or technical assistance dedicated to enhancing your community's energy resilience, renewable energy, and/or energy efficiency. Please include up to three projects started in the past 5 years or planned for the next 5 years. If you have not conducted previous work in energy resilience, renewable energy, or energy efficiency, please state "Does not apply." Note: Having no previous energy-related work will not impact your application.
 - a) Project title
 - b) Project time frame
 - c) Project goal and energy challenge addressed
 - d) Type of energy resilience, renewable energy, or efficiency technology or process used to address the challenge
 - e) Project outcomes, including generation capacity or efficiency measures installed, renewable electricity generated, or energy savings (if applicable or known)
 - f) Local/regional participating organizations and stakeholders engaged
 - g) Federal/state/private funding or technical assistance source and amount.

Project Goals (40%)

- 4. Describe the technical assistance you're requesting and how the technical assistance proposed will impact and advance your community's energy goals to develop and maintain energy resilience. (500 words maximum) Consider the following questions in your response:
 - a) What are your energy goals, and how do they improve your energy resilience? Note: Goals to assess energy needs for determining specific energy resilience goals are eligible activities.
 - b) What information do you need to advance these energy goals?
 - c) Does your community have an energy plan or hazard mitigation plan with energy goals included?

- d) In what areas (e.g., governance of energy systems, grid modernization, renewable energy generation, energy storage systems, energy efficiency, clean transportation, etc.) may your community or organization need research, analysis, planning, or training support?
- 5. Why is this project important to your community? Describe the anticipated impact of the requested assistance to enhance your community's energy systems, energy transition goals, and energy resilience that could result in sustained, positive impact on the community. (500 words maximum)

Commitment (25%)

- 6. Please list the community decision makers or leaders who are providing written verification (i.e., email, signed letter, or other form of written correspondence) of their commitment to the proposed technical assistance project. Decision makers can include, but are not limited to, community government and leadership, local utilities, and public utility commissions.
 - Applicants are encouraged to provide at least two verifications of commitment. Applicants are required to submit these documents with their application.

To:

From: Bainbridge Island Climate Change Advisory Committee

RE: Endorsement of City Application for Technical Assistance

The Bainbridge Island Climate Change Advisory Committee (CCAC) fully supports the City of Bainbridge Island pursuing the Department of Energy's "Energy Transitions Initiative Partnership Project". We believe the technical assistance provided by the program will help our community meet the ambitious goals established by our City Council to transition our Island away from the use of fossil fuels for generating electricity; prepare our Island from the current and future impacts of climate change; and increase the reliability of our electricity for all Islanders.

The Bainbridge Island City Council established the CCAC in the fall of 2017. It was established to serve as a technical and planning advisory committee to the City Council, City Manager, and City staff on issues related to climate change. In 2019, the City Council tasked the CCAC to develop a Climate Action Plan (CAP) for the Island. The City Council approved the first-ever CAP in November 2020.

As part of developing the CAP, the city commissioned a greenhouse emissions (GHG) inventory for the Island. Energy use was found to be the largest source of our Community GHG emissions - about 53% of the Community's GHG emissions come from the generation, transmission, and use of electricity. To assist in meeting our GHG reduction targets, the CAP established a goal for our electricity supply to be carbon-free by 2040.

The technical assistance requested from the National Renewable Energy Lab will help us evaluate how we can get to 100% renewable electricity for the island by 2030. We have heard from many people in our community that they would like to achieve the goal of 100% renewable electricity sooner than 2040. Also, our electricity supplier - Puget Sound Energy, has agreed to participate in the program, which we believe is critical if we want to achieve our ambitious goal.

We also believe the technical assistance can help us meet another goal in the CAP that half of the Community disaster hubs (soon to be 16 hubs) would have installed 6-20kW solar arrays and storage and resilience by 2030. In addition, we believe the technical assistance can help us understand how to improve the reliability of the Island's electrical supply, especially as extreme weather events and flooding increase over the next decades from climate change.

We believe the technical assistance program provide by this program could help our Island Community understand what actions we need to take to move us towards our goal for a carbon-free future with a reliable and safe energy supply.

David McCaughey, Chair

Climate Change Advisory Committee



"Why Join" Online Letter for the Climate Smart Challenge

Dear Bainbridge Neighbor,

In recent years, we have seen more and more local examples of climate change with intense heat waves, smoke from summer wildfires, extreme tides, and frequent flooding. Climate change threatens our economic vitality, our health, and our future.

However, climate change also presents each of us with opportunities. An opportunity to show how a community of determined individuals can work together to reduce greenhouse gas emissions. An opportunity to demonstrate the power of a small city to fight climate change and serve as a role model for others. An opportunity to raise our community voice, improve public health and promote a green economy in support of the future we desire for ourselves and today's young people.

The choices we make now will significantly determine the future Bainbridge Island that our children will inherit. Fortunately, we can create a positive legacy through both local leadership and collective action. Each of us has an important role to play in the fight on climate change, because each of us can make a difference.

The Climate Smart Challenge makes it easy to identify those actions that can produce the most benefits based on your unique lifestyle. Access helpful tips and resources to reduce your carbon footprint, track your progress, and challenge your friends and neighbors to do their part.

The time for collective action on climate change is now! Join us in our Bainbridge journey to a climate smart future.



Request for Qualifications (RFQ)

RFQ: MEASURING GHG EMISSIONS REDUCTIONS ASSOCIATED WITH SUSTAINABLE TRANSPORTATION OPTIONS IN THE CITY OF BAINBRIDGE ISLAND Publication date: TBD, 2022

The City of Bainbridge Island (COBI) seeks qualified professionals to improve the accuracy and reporting of greenhouse gas (GHG) emissions associated with our transportation sector.

Background

In November 2020, Bainbridge Island City Council approved the first-ever Bainbridge Island Climate Action Plan (CAP) which sets a goal to reduce GHG emissions by 90% by 2045 compared to 2014 levels, with interim milestones of 25% reduction by 2025 and 60% by 2035. Transportation was responsible for approximately 34% of 2018 community greenhouse gas emissions, including on-road vehicles, air travel, ferry travel and off-road vehicles and equipment.

COBI is currently working on a <u>Sustainable Transportation Plan</u> to establish the long-range vision for how we travel on the island by providing a transportation system (streets, transit, trails, etc.) that improves mobility and safety for all users while respecting the character of neighborhoods and maintaining a climate resilient environment. The Sustainable Transportation Plan identifies three different scenarios for how, when and where a set of potential infrastructure projects would be completed. The City Council is scheduled to adopt the plan and select one of these three scenarios in March/April 2022.

COBI would like to measure the GHG emissions reduction potential associated with the suite of projects identified in the preferred scenario in the Sustainable Transportation Plan to reduce vehicle miles traveled by on-road vehicles and identify and measure additional activities on Bainbridge Island that could help reduce GHG emissions associated with on-road vehicles and vehicle miles traveled.

Scope of Work

- Develop baseline data for current vehicle miles traveled (VMT) and the associated GHG
 emissions, origin-destination-route data, and trip speed-travel time-length data on Bainbridge
 Island using Streetlight or other, similar data sources.
- Recommend other performance metrics, other than VMT, for measuring transportation related GHG emission reductions.
- Provide projections on the anticipated reductions in VMT and associated GHG emission reductions for the preferred scenario in the Sustainable Transportation Plan.
- Create a methodology for continuing to integrate more site-specific VMT data that can be used to update Bainbridge's GHG emissions inventory.
- Identify and analyze additional actions related to transportation that could reduce VMT and associated GHG emissions. Additional actions should include, but not be limited to, land use/zoning decisions, bike/ped infrastructure, public transit expansion, infrastructure for electric vehicles, punitive measures (such as fees for parking), etc.
- Create a methodology and tool(s) that COBI staff can use to help inform future decisions related to what actions will achieve the greatest reduction in VMT and associated GHG emissions reductions over time in transportation related activities.

- Recommend cost-effective options for measuring changes in VMT on Bainbridge Island for future GHG emissions inventories.
- Develop presentation summarizing results and recommended next steps.

Timeline:

 Project to be completed within 12 months of contract execution. Please note that the next community GHG emissions inventory is planned in mid-2022 or mid-2023.

Submittals

Individuals or firms wishing to respond to this RFQ must submit a written statement of qualifications (SOQ) that clearly and accurately demonstrates an understanding of the scope of work to be done and the applicant's specialized knowledge and experience showcasing an ability to perform the services outlined in the scope of work. Each SOQ must include the following components:

- Resumes of the professionals who will perform the work.
- Examples of previous project experience measuring actual vehicle miles traveled and travel by mode in a community.
 Examples of previous project experience measuring estimated GHG emissions reduction potential associated with transportation-related actions at a local government level.
- Two references.
- Fee schedule/hourly rate (including any administrative fees or surcharges).

Submit your SOQ by 4:00 PM on (DATE TBD), 2022. Submittals are limited to 20 pages, not counting the cover page. Responses should be sent via email under the subject "COBI Sustainable Transportation GHG Emissions Project" to asalamack@bainbridgewa.gov. Submittals must be received by the deadline. Submittals received after the deadline will not be considered.

Email is the preferred method, but responses may also be mailed or dropped off at City Hall (Monday – Friday, from 8:00 AM to 4:00 PM). Print copies should be double-sided, with no cover or binding.

City Hall

280 Madison Ave N

Bainbridge Island, WA 98110

Attention: Autumn Salamack, COBI Sustainable Transportation GHG Emissions

Evaluation/Selection Process

TBD Deadline to submitTBD Potential interviews

• TBD Date of selection of the most qualified applicant

Evaluation Criteria

A qualifications-based selection process will be used to select finalists from the pool of applicants and to select the most qualified applicant or applicants.

Individuals or entities with strong experience in the areas listed below are encouraged to apply.

The following will be used to evaluate and rank responses to this RFQ:

- Experience measuring mode split and VMT reductions at a city level.
- Experience identifying and measuring estimated GHG emissions reduction potential associated with transportation-related actions (including VMT reduction, land use/zoning, incentives/punitive measures, fuel switching, etc.).
- Ability to perform the requested work within the desired timeframe.
- Attention to detail.
- Compliance with RFQ requirements.
- Professional references.
- Fee schedule/hourly rate (including any administrative fees or surcharges).

Terms and Conditions

Questions regarding this RFQ or the submittal process should be directed to Climate Mitigation and Adaptation Officer Autumn Salamack at asalamack@bainbridgewa.gov or 206-780-8590.

Selected applicants will be required to execute a City of Bainbridge Island Professional Services Agreement and obtain a City of Bainbridge Island Business License.

The City reserves the right to reject any and all submittals and to waive irregularities and informalities in this RFQ process. This RFQ does not obligate the City to pay any cost incurred by applicants in responding to this RFQ. All such costs shall be borne solely by each applicant. Furthermore, this RFQ does not obligate the City to enter into a contract with any applicant responding to this RFQ.

In the event that the City and the most qualified applicant cannot negotiate a mutually agreeable contract for the services specified in this RFQ at a price which the City, at its sole discretion, determines is fair and reasonable, the City reserves the right to terminate negotiations with that applicant and begin negotiations with the next most qualified applicant or begin a new process to select a consultant to perform the services specified in this RFQ.

Americans with Disabilities Act (ADA) Information

The City of Bainbridge Island in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all its programs and activities. This material can be made available in an alternate format by emailing cityclerk@bainbridgewa.gov or by calling collect 206.842.2545.

Title VI Notice

The City of Bainbridge Island in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin or sex in consideration for an award.

To: Bainbridge Island City Council

From: Climate Change Advisory Committee (CCAC)

Subject: Endorsement of Scenario #2 from the Sustainable Transportation Plan from the Climate Change Advisory Committee

Dear Council:

At the last CCAC meeting on February 16th, we discussed the Sustainable Transportation Plan (STP) and the three scenarios that were shared with Council at a study session on Feb. 15th. We want to voice our endorsement and support for Scenario #2 in the STP that the Council is considering. Also, we want to provide some suggestions for how the CCAC can contribute to future work on issues related to climate change and transportation.

This is in addition and different from a recent memo that responded to a Council request for the CCAC to provide recommendations on sustainable transportation greenhouse gas (GHG) emissions reduction performance metrics for transportation projects associated with the Island's Sustainable Transportation Plan.

In that memo, we also suggested the city hire a consultant to help develop a more accurate baseline of potential GHG reductions related to the selected scenario, evaluate other elements that could further reduce emissions, and evaluate tools to help measure reductions over time.

Our committee's suggestions on the STP comes from two sources of information:

- 1. From the climate action plans (CAP) transportation-related goals and our latest GHG emission inventory.
- 2. From research that our committee has conducted in the past few months with the aid of an intern (see attached executive summary. The full report is included in a separate attachment).

We have summarized our comments based on two questions all CCAC members were asked.

Question #1 - Do you have any opinion on the three scenarios that were shared and detailed in regard to whether one of the scenarios will do a better job of achieving the goals of the Climate Action Plan?

 Our committee has studied and understands the three scenarios, and is supportive of Scenario #2 if that's chosen, especially if there is broad community support, which there appears to be. We believe Scenario #2 is a good initial focus and can be built on over time to include elements from Scenario #3. Since all three scenarios improve our pedestrian, bike, and transit networks there likely wouldn't be a dramatic difference in VMT or GHG emissions between them. Question #2 - Do you feel confident that the vision plan has the right elements (STO, walking & rolling network, transit & shared mobility network, programs/policies) for the city to achieve the transportation-related goals of the Climate Action Plan? Are there any important elements missing?

- The STP does a very thorough job of analyzing how to reduce vehicle miles traveled (VMT) by improving our walking, biking, and transit networks. We do believe however, as covered in our prior memo, there is a need to establish a baseline of VMT reductions (with the associated GHG emission reductions). Also, we believe it is important to develop a methodology on how to evaluate the change in VMT and GHG emission reductions over time for the selected scenario and how other elements such as land use will contribute to the reduction.
- An area that's not emphasized much in the plan but which is fundamental
 is electrification (e.g., supporting the transition to electric vehicles and e-bikes/escooters). According to the latest GHG emissions inventory about 13% of our island's
 emission are from on-road vehicles. If our electricity was 100% clean and our cars were
 all electric that would be completely eliminated.

A recent study by the Institute for Transportation & Development Policy (ITDP) and the University of California Davis calculated that aggressive adoption of EVs would reduce transportation-related emissions by 44 gigatons by 2050 (worldwide). "Compact cities" (reducing the need for vehicles) would lower the burden by 33 gigatons. Together, the two approaches would reduce emissions by 59 gigatons, comfortably below the Paris target. The conclusion was that the greatest impact comes from pursuing both of these goals in tandem, versus just one or the other.

- Another area that's not emphasized much in the plan is land use and zoning namely
 where and how we add housing units over the next 10-20 years. This was brought up
 repeatedly by other cities and by a transportation firm that we consulted with (Fehrs
 and Peers). We would encourage the city to identify next steps in that area, which may
 already be underway, and could potentially be included in the RFP for consulting help.
- There are several other transportation areas that the GHG emissions inventory included. These included: a) ferries (7% of total) which will be reduced with the electrification of ferries; b) airline travel (11% of total) where reductions will come from education and changes in transportation; and c) off-road emissions (4% of total) which will come from other initiatives such as banning gas powered equipment.

We hope this memo provides an additional and helpful perspective on the Sustainable Transportation Plan. Please follow-up with our committee with any questions.

Regards, Climate Change Advisory Committee Attachment A: Executive Summary of Report on Methods for Sustainable Transportation Decision-Making: March 2022

The City of Bainbridge Island (COBI) and Sustainable Bainbridge are seeking to develop a decision-making framework for evaluating sustainable and non-motorized transportation project proposals. The goal of this framework is to optimize outcomes for greenhouse gas emissions (GHGe) reductions and to quantify these reductions. Scenarios will need to be evaluated against standards and targets and prioritized and/or compared to each other before they are chosen. After implementation, system-wide performance will need to be evaluated for performance (benchmarked).

When it comes to GHGe and vehicle miles traveled (VMT), system and scenario-level analysis is preferable to studying the impacts of specific projects. Quantifying these metrics for individual projects would be costly and could be misleading, since projects are often meant to work together for their full effect.

In 2014, the consulting group Cascadia developed a GHGe inventory for Bainbridge Island. To estimate emissions from the transportation sector, they used a regional model and scaled it down to the municipal level. This was a crude method that is far less accurate than an island-specific sketch model.

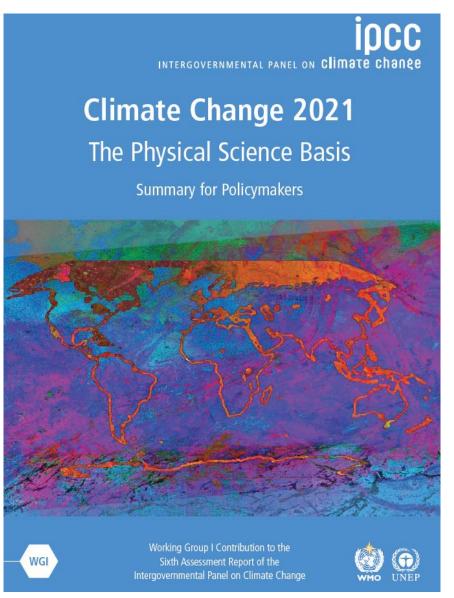
Method	Description
Method #1: Transportation Demand Model	Transportation Demand Models (TDMs) use surveys and observed data to estimate real-world transportation conditions and project how future changes to the transit system and the community will change transportation behavior.
Method #2: Sketch Models	Sketch models are less expensive and less complex than TDMs, but still can be used to project future GHGe reductions under different scenarios.
Method #3: Cell Phone Data	Using cell phone data to analyze transportation systems is an emerging technology trend. Personal cell phones that are using location-enables apps provide movement data that can be extrapolated into travel data. This data can be used to help create sketch models.
Method #4: Community Travel Survey	Community travel surveys can be distributed to citizens to gain insights into transportation behavior and preferences. This is an expensive option that is not ideal for projecting future changes to the transportation system.
Method #5: Qualitative	Although qualitative measures do not lend themselves to

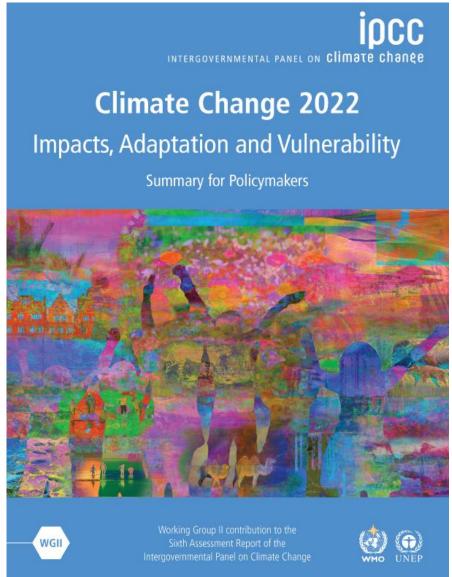
quantifications of GHGe or VMT, they bear mentioning because many environmentally-minded qualitative sustainable
transportation measures are used by other agencies.

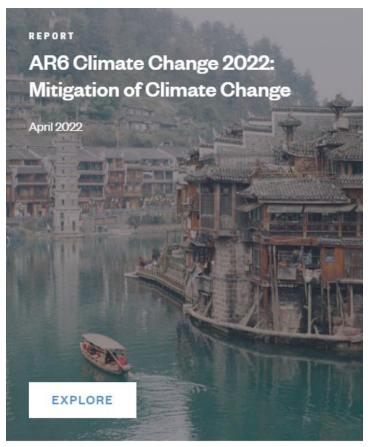
We recommend method #2: Sketch Models, method #3: Cell Phone Data, and method #5: Qualitative Data. In particular, under method #2, we recommend hiring a consulting firm to apply a sketch model to the Island. This would enable scenario planning and the comparison of mitigation strategies based on GHGe reduction. For this document, we spoke with Fehr & Peers. For method #3: Cell Phone Data, StreetLightData would be the most comprehensive and accurate option for getting a baseline for VMT on Bainbridge Island.

After detailing these options, along with their major pros and cons, next steps are detailed based on the Climate Change Advisory Committee (CCAC) memo to Bainbridge Island City Council titled *Recommendations in Response to Council Request to Define and Measure Sustainable Transportation Plan Projects*. The research that went into this document informed the content of that memo in part.

To identify these options, research was conducted on what other local jurisdictions and groups have done to address sustainable transportation planning and GHGe accounting. We interviewed officials with Federal Way, Bellevue, Olympia, the Puget Sound Regional Council (PSRC), the Washington Department of Transportation (WSDOT), the University of Washington, and the transportation planning consulting group Fehr & Peers. We also reviewed documents from the Federal Highway Administration (FHWA), Environmental Protection Agency (EPA), Redmond, Shoreline, and many other sources.







Coming soon

The New York Times

Climate Change Is Harming the Planet Faster Than We Can Adapt, U.N. Warns

Countries aren't doing nearly enough to protect against the disasters to come as the planet keeps heating up, a major new scientific report concludes.

Time Is Running Out to Avert a Harrowing Future, Climate Panel Warns

The impacts of global warming are appearing faster than expected, according to a major new scientific report. It could soon become much harder to cope.

SCIENTIFIC AMERICAN

CLIMATE CHANGE

With 'Limited Amount of Time Left,' New IPCC Report Urges Climate Adaptation

Human and natural systems are already buckling under the influence of global warming, write the authors of a landmark report

Key Takeaways – WRI

- Climate impacts are already more widespread and severe than expected.
- 2. We are locked into even worse impacts from climate change in the near-term.
- Risks will escalate quickly with higher temperatures, often causing irreversible impacts of climate change.
- Inequity, conflict and development challenges heighten vulnerability to climate risks.
- Adaptation is crucial. Feasible solutions already exist, but more support must reach vulnerable communities.

Key Takeaways – NYT

- 1. Climate hazards have worsened significantly in the past decade.
- 2. If warming isn't slowed, the dangers will multiply.
- 3. Societies have not done enough to adapt and stay safe.
- 4. As warming continues, it will become harder and harder to cope.
- 5. Poor countries face much bigger challenges than rich ones.

Chapters



CHAPTER1

Point of departure and key concepts

Chapter 1 introduces the Working Group II contribution to



CHAPTER 4

Water



CHAPTER 2

Terrestrial and freshwater ecosystems and their services



CHAPTER 3

Ocean and coastal ecosystems and their services



CHAPTER 6

Cities, settlements and key infrastructure



CHAPTER 7

Health, wellbeing and the changing structure of communities



Food, fibre, and other ecosystem products

CHAPTER 8

CHAPTER 5

Poverty, livelihoods and sustainable development



+ other regions

CHAPTER 9

Africa

Chapter 9 assesses climate change impacts and risks,



CHAPTER 16

Key risks across sectors and regions



CHAPTER 17

Decision-making options for managing risk



CHAPTER 18

Climate resilient development pathways



COMPARING RISKS FROM RISING TEMPERATURES:

EXPLAINING THE IPCC'S WORKING GROUP II REPORT (AR6)

	1.5°C	2°C	3°C	1.5°C vs 2°C	1.5°C vs 3°C
BIODIVERSITY LOSS Maximum percentage of species at high risk of extinction across forests and land	14%	18%	29%	1.3x WORSE	2.1x WORSE
DROUGHT Dryland population exposed to water stress, heat stress and desertification	0.95B PEOPLE	1.15B PEOPLE	1.29B PEOPLE	200M MORE PEOPLE	340M MORE PEOPLE
FOOD SECURITY Costs for adaptation and residual damage to major crops	\$63 BILLION US	\$80 BILLION US	\$128 BILLION US	\$17B MORE	\$65B MORE
FIRES Increases in burnt area across Mediterranean Europe	40- 54%	62- 87%	96- 187%	1.6x WORSE	3x worse
EXTREME HEAT Increase in number of days per year with a maximum temperature above 35°C (95°F)	45-58	52- 68	66- 87	1.2x WORSE	1.5x WORSE
EXTREME HEAT Increase in annual number of heatwaves in Southern Africa	2-4 TIMES	4-8 TIMES	8-12 TIMES	2x WORSE	3.3x WORSE
SEA LEVEL RISE Global mean sea level rise by 2100	0.28- 0.55m	0.33- 0.61m	0.44- 0.76m	1.1x worse	1.4x worse
FLOODS Increase in global population exposed to flooding	24%	30%	NO DATA AVAILABLE	1.3x WORSE	NO DATA AVAILABLE
CORAL REEFS Further decline in coral reefs	70- 90%	99%	NO DATA AVAILABLE	1.2x WORSE	NO DATA AVAILABLE
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Note: For climate risks with projected ranges, we used the midpoint of the ranges to compare risks at different temperature thresholds. Sea level rise projections correspond to SSPI-19, SSPI-2.6, SSP2-4.5, which are roughly approximate to global warming of 1.5°C, 2°C, and 3°C, respectively.

<u>6 Big Findings from the IPCC 2022 Report on Climate</u> <u>Impacts, Adaptation and Vulnerability | World Resources</u> <u>Institute (wri.org)</u>

What's needed to accelerate adaptation?

(SPM C.5.1) - Political commitment and follow-through across all levels of government. Accelerating commitment and follow-through is promoted by:

- rising public awareness,
- building business cases for adaptation,
- accountability and transparency mechanisms,
- monitoring and evaluation of adaptation progress,
- social movements, and
- climate-related litigation in some regions

What's needed to accelerate adaptation? (cont'd)

(SPM.C.5.2) -- Adaptation actions are strengthened and sustained by institutional frameworks, policies and instruments that 1) set **clear adaptation goals**, 2) **define responsibilities and commitments**, and 3) that are **coordinated amongst actors** and governance levels

Sustained adaptation actions are strengthened by mainstreaming adaptation into institutional budget and policy planning cycles, statutory planning, monitoring and evaluation frameworks, and into recovery efforts from disaster events

What's needed to accelerate adaptation? (cont'd)

SPM.C.5.3 -- Enhancing knowledge on risks, impacts, and their consequences, and available adaptation options promotes societal and policy responses

SPMC.5.4 – enhanced mobilization of and access to financial resources are essential for implementation of adaptation and to reduce adaptation gaps

SPM.C.5.5 -- Monitoring and evaluation (M&E) of adaptation are critical for tracking progress and enabling effective adaptation...monitoring of outcomes is critical for tracking the effectiveness

SPM.C.5.6 -- Inclusive governance that prioritizes equity and justice in adaptation planning and implementation leads to more effective and sustainable adaptation outcomes

Concept of "hard" and "soft" adaptation limits

"Soft" limits: effective adaptation measures exist, but political, economic and social challenges hinder implementation, such as limited access to finance.

"Hard" limits: when climate impacts are so severe that no existing adaptation measures can effectively prevent losses and damages

Useful summaries:

- 6 Big Findings from the IPCC 2022 Report on Climate Impacts, Adaptation and Vulnerability | World Resources Institute (wri.org)
- With 'Limited Amount of Time Left,' New IPCC Report Urges Climate Adaptation -Scientific American
- The new IPCC report's grim predictions, and why adaptation efforts are falling behind (phys.org)
- <u>5 Takeaways From the U.N. Report on Climate Hazards The New York Times</u> (nytimes.com)

And the report:

 Climate Change 2022: Impacts, Adaptation and Vulnerability | Climate Change 2022: Impacts, Adaptation and Vulnerability (ipcc.ch)